

IN THE CLAIMS

The following claim listing replaces all prior listings and versions of the claims:

LISTING OF CLAIMS

1. (Currently Amended) A battery pack apparatus comprising:

a battery pack including a plurality of rechargeable batteries arranged in parallel and defining a predetermined direction, wherein the rechargeable batteries having comprise at least one cooling medium passages-formed passage provided therebetween; and

a cross flow fan disposed with an intake chamber facing a distribution space formed adjacent to ~~one~~ a side face of the battery pack to supply or discharge a cooling medium to the at least one ~~each of the~~ cooling medium passages passage, wherein the fan having comprises an impeller disposed such that a rotational axis of the impeller is aligned with the predetermined thereof follows an aligning direction of the rechargeable batteries, wherein

an axial position of the fan is eccentric with respect to a center line of the distribution space in a rotating direction of the impeller relative to the distribution space, wherein the center line is perpendicular parallel to both the aligning predetermined direction of the rechargeable batteries ~~in a direction of movement of the impeller at the distribution space side~~ and the rotational axis of the impeller.

2. (Currently Amended) A battery pack apparatus comprising:

a battery pack including a plurality of rechargeable batteries arranged in parallel and defining a predetermined direction, wherein the rechargeable batteries comprise at least one having cooling medium passage passages formed therebetween; and

a cross flow fan disposed with an intake chamber facing a distribution space formed adjacent to ~~one a~~ a side face of the battery pack to supply or discharge a cooling medium to the at least one each of the cooling medium passages passage, wherein the fan having comprises an impeller disposed such that a rotational axis of the impeller is aligned with the predetermined thereof ~~follows an aligning~~ direction of the rechargeable batteries, wherein

a length of a stabilizer of the fan is from 1.5 to 5 times the size of a gap between an extremity of the stabilizer and the outer circumference of the impeller, and an intake chamber wall comprises ~~doubles~~ as an air discharge passage wall or is adjacent to an air discharge passage wall.

3. (Currently Amended) A battery pack apparatus comprising:

a battery pack including a plurality of rechargeable batteries arranged in parallel and defining a predetermined direction, wherein the rechargeable batteries comprise at least one having cooling medium passages passage passages formed therebetween; and

a cross flow fan disposed with an intake chamber facing a distribution space formed adjacent to ~~one a~~ a side face of the battery pack to supply or discharge a cooling medium to the at least one each of the cooling medium passages passage, wherein the fan having comprises an impeller disposed such that a rotational axis of the impeller is

aligned with the predetermined thereof follows an aligning direction of the rechargeable batteries, wherein

an axial position of the fan is eccentric with respect to a center line of the distribution space in a rotating direction of the impeller relative to the distribution space, wherein the center line is perpendicular parallel to both the aligning predetermined direction of the rechargeable batteries and the rotational axis of the impeller in a direction of movement of the impeller at the distribution space side, and

a length of a stabilizer of the fan is from 1.5 to 5 times the size of a gap between an extremity of the stabilizer and the outer circumference of the impeller, and an intake chamber wall comprises doubles as an air discharge passage wall or is adjacent to an air discharge passage wall.

4. (Currently Amended) The battery pack apparatus according to claim 1, wherein

an eccentricity amount x of the rotational axis of the fan with respect to a diameter D of the impeller satisfies is set to satisfy $0 < x < 1.0D$.

5. (Currently Amended) The battery pack apparatus according to claim 1, wherein

an eccentricity amount x of the rotational axis of the fan with respect to a diameter D of the impeller satisfies is set to satisfy $0.2D < x < 0.5D$.

6. (Currently Amended) The battery pack apparatus according to claim 1, wherein

the battery pack apparatus satisfies ~~is configured to satisfy~~ $F \geq L/2$ where L is a length of the battery pack in the aligning predetermined direction of the rechargeable batteries and F is a length in the axial direction of the impeller.

7. (Currently Amended) The battery pack apparatus according to claim 1, wherein

The rotational axis of the fan is disposed to be perpendicular with respect to the at least one cooling medium ~~passages~~ passage.

8. (Currently Amended) The battery pack apparatus according to claim 1, wherein

the fan is disposed so as to satisfy $y < L/n$ where y is a displacement amount of the center of the impeller in the axial direction with respect to the center of the battery pack in the aligning predetermined direction of the rechargeable batteries, L is a length of the battery pack in the aligning predetermined direction of the rechargeable batteries, and n is the number of the rechargeable batteries of the battery pack.

9. (Currently Amended) The battery pack apparatus according to claim 1,
wherein

the fan is disposed such that ~~positions of junctures~~ at least one juncture of vanes of the impeller in the axial direction are offset from ~~positions opposite to the~~ at least one cooling medium ~~passages~~ passage.

10. (Currently Amended) The battery pack apparatus according to claim 3,
wherein

an eccentricity amount x of the axis of the fan with respect to a diameter D of the impeller satisfies ~~is set to satisfy~~ $0 < x < 1.0D$.

11. (Currently Amended) The battery pack apparatus according to claim 3,
wherein

an eccentricity amount x of the axis of the fan with respect to a diameter D of the impeller satisfies ~~is set to satisfy~~ $0.2D < x < 0.5D$.

12. (Currently Amended) The battery pack apparatus according to claim 2,
wherein

the battery pack apparatus satisfies ~~is configured to satisfy~~ $F \geq L/2$ where L is a length of the battery pack in the aligning direction of the rechargeable batteries and F is a length in the axial direction of the impeller.

13. (Currently Amended) The battery pack apparatus according to claim 3, wherein

the battery pack apparatus ~~satisfies~~ is configured to satisfy $F \geq L/2$ where L is a length of the battery pack in the aligning direction of the rechargeable batteries and F is a length in the axial direction of the impeller.

14. (Currently Amended) The battery pack apparatus according to claim 2, wherein

The rotational axis of the fan is disposed to be perpendicular with respect to the at least one cooling medium passages passage.

15. (Currently Amended) The battery pack apparatus according to claim 3, wherein

the rotational axis of the fan is disposed to be perpendicular with respect to the at least one cooling medium passages passage.

16. (Currently Amended) The battery pack apparatus according to claim 2, wherein

the fan is disposed so as to satisfy $y < L/n$ where y is a displacement amount of the center of the impeller in the axial direction with respect to the center of the battery pack in the aligning predetermined direction of the rechargeable batteries, L is a length of the battery pack in the aligning predetermined direction of the rechargeable batteries, and n is the number of the rechargeable batteries of the battery pack.

17. (Currently Amended) The battery pack apparatus according to claim 3,
wherein

the fan is disposed so as to satisfy $y < L/n$ where y is a displacement amount of the center of the impeller in the axial direction with respect to the center of the battery pack in the aligning predetermined direction of the rechargeable batteries, L is a length of the battery pack in the aligning predetermined direction of the rechargeable batteries, and n is the number of the rechargeable batteries of the battery pack.

18. (Currently Amended) The battery pack apparatus according to claim 2,
wherein

the fan is disposed such that ~~positions of junctures~~ at least one juncture of vanes of the impeller in the axial direction are offset from ~~positions opposite to the~~ at least one cooling medium passages passage.

19. (Currently Amended) The battery pack apparatus according to claim 3,
wherein

the fan is disposed such that ~~positions of junctures~~ at least one juncture of vanes of the impeller in the axial direction are offset from ~~positions opposite to the~~ at least one cooling medium passages passage.